

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2812	(Group III nitride or semiconductor near3 nitride or AlGaInN or AlGaIn or aluminum gallium indium nitride or aluminum gallium nitride) with (CVD or PVD or chemical vapor or physical vapor or sputter\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:04
S2	29399173	@ad< "20041122"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:05
S3	1836	S1 and S2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:05
S4	709	(Group III nitride or semiconductor near3 nitride or AlGaInN or AlGaIn or aluminum gallium indium nitride or aluminum gallium nitride) with (PVD or physical vapor or sputter\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:16
S5	447	S4 and S2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:18
S6	0	(Group III nitride or semiconductor near3 nitride or AlGaInN or AlGaIn or aluminum gallium indium nitride or aluminum gallium nitride) and (vertical grow\$3 adj5 (larger or greater or more) adj5 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:39
S7	0	(Group III nitride or semiconductor near3 nitride or AlGaInN or AlGaIn or aluminum gallium indium nitride or aluminum gallium nitride) and (vertical grow\$3 adj10 (larger or greater or more) adj10 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:39

S8	0	(vertical grow\$3 adj10 (larger or greater or more) adj10 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:40
S9	1244	(vertical adj10 (larger or greater or more) adj10 lateral)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:40
S10	15	(Group III nitride or semiconductor near3 nitride or AlGaInN or AlGaIn or aluminum gallium indium nitride or aluminum gallium nitride) and (vertical adj5 (larger or greater or more) adj5 lateral )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:40
S11	40	"6582986"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 11:23
S12	40	("4498093"   "4971928"   "5145809"   "5962875"   "6043146"   "6051849"   "6121121"   "6139629"   "6177688"   "6225650"   "6413627").FN. OR ("6582986").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/03/26 14:13
S13	43	("4498093"   "4971928"   "5145809"   "5962875"   "6043146"   "6051849"   "6121121"   "6139629"   "6177688"   "6225650"   "6413627").FN. OR ("6582986").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/06/22 10:21
S14	0	(vertical grow\$3 adj10 (width near5 (greater or higher or larger or wider)) adj7 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/22 12:04
S15	0	(vertical grow\$3 with (width near5 (greater or higher or larger or wider)) with lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/22 12:04
S16	0	(vertical grow\$3 with (width near7 (greater or higher or larger or wider)) with lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/22 12:04

S17	174	("4127792"   "4522661"   "4651407"   "4865685"   "4876210"   "4912064"   "4946547"   "5122845"   "5389571"   "5397736"   "5549747"   "5710057"   "5760426"   "5786606"   "5815520"   "5877070"   "5880485"   "Re34861"). PN. OR ("6051849"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/06/22 14:24
S18	9	("4971928"   "5814533"   "5962875"   "6051849"   "6121121"   "6139629"   "6153010"   "6177688"   "6413627").PN. OR ("6955977").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/06/22 15:44
S19	492	(438/481).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2009/06/22 15:56
S20	11	("4971928"   "5962875"   "5970314"   "6051849"   "6121121"   "6139629"   "6177688").PN. OR ("6812053").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/06/22 15:58
S21	6	("4971928"   "5962875"   "6051849"   "6121121"   "6139629"   "6177688"). PN. OR ("6803602"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/06/22 15:59
S22	19	(US-20030180580-\$.did. or (US-6582986-\$. or US- 7101444-\$. or US-7115486- \$. or US-7208393-\$. or US- 6921673-\$. or US-6890785- \$. or US-6225650-\$. or US- 6121121-\$. or US-6051849- \$. or US-7176497-\$. or US- 7154128-\$. or US-7141444- \$. or US-7052979-\$. or US- 6967122-\$. or US-6955977- \$. or US-6881651-\$. or US- 6815241-\$.).did. or (WO- 0127980-\$.).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 09:06
S23	10	S22 and ((InAlGaN or AlGaInN or AlInGaN or aluminum indium gallium nitride or indium aluminum gallium nitride or aluminum gallium indium nitride)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 09:07

S24	2	("6940103").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2009/06/23 09:45
S25	20	(US-20030180580-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486- \$ or US-7208393-\$ or US- 6921673-\$ or US-6890785- \$ or US-6225650-\$ or US- 6121121-\$ or US-6051849- \$ or US-7176497-\$ or US- 7154128-\$ or US-7141444- \$ or US-7052979-\$ or US- 6967122-\$ or US-6955977- \$ or US-6881651-\$ or US- 6815241-\$ or US-6940103- \$).did. or (WO-0127980-\$). did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 10:01
S26	10	S25 and (bandgap or band gap)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 10:01
S27	19	(active (layer or region) or quantum well or MQW or SQW or QW) near5 (smaller or lower) near5 (bandgap or band gap or band-gap) near5 (cladding or contact) (layer or film or material)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 10:21
S28	209	((active (layer or region) or quantum well or MQW or SQW or QW) near5 (smaller or lower) near5 (bandgap or band gap or band-gap)) with (benefit \$4 or increas\$3 or decreas \$3 or provid\$3 or reduc\$3 or advantag\$4 or improv \$3 or serve or help or enhanc\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 11:16
S29	2	((active (layer or region) or quantum well or MQW or SQW or QW) near5 (smaller or lower) near5 (bandgap or band gap or band-gap)) adj10 (InAlGaIn or AlGaInN or AlInGaIn or aluminum indium gallium nitride or indium aluminum gallium nitride or aluminum gallium indium nitride)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 11:23

S30	3	"20040079960"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 11:35
S31	72	(substrate) near5 (compris \$4 or made) near5 (InAlGaN or AlGaInN or AlInGaN or aluminum indium gallium nitride or indium aluminum gallium nitride or aluminum gallium induim nitride)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 14:30
S32	22	(US-20030180580-\$ or US- 20040079960-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486- \$ or US-7208393-\$ or US- 6921673-\$ or US-6890785- \$ or US-6225650-\$ or US- 6121121-\$ or US-6051849- \$ or US-7176497-\$ or US- 7154128-\$ or US-7141444- \$ or US-7052979-\$ or US- 6967122-\$ or US-6955977- \$ or US-6881651-\$ or US- 6815241-\$ or US-6940103- \$ or US-7071015-\$).did. or (WO-0127980-\$).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 14:30
S33	0	S32 and S31	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 14:30
S34	24	(US-20030180580-\$ or US- 20040079960-\$ or US- 20060078024-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486- \$ or US-7208393-\$ or US- 6921673-\$ or US-6890785- \$ or US-6225650-\$ or US- 6121121-\$ or US-6051849- \$ or US-7176497-\$ or US- 7154128-\$ or US-7141444- \$ or US-7052979-\$ or US- 6967122-\$ or US-6955977- \$ or US-6881651-\$ or US- 6815241-\$ or US-6940103- \$ or US-7071015-\$).did. or (WO-0127980-\$ or US- 20010053618-\$).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 15:07
S35	0	S34 and (buffer layer near7 (change or changing) near7 (thickness or growth or growing) direction)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08

S36	0	S34 and (buffer layer near7 (change or changing) near7 (thickness or growth or growing))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08
S37	203	(buffer layer near7 (change or changing) near7 (thickness or growth or growing))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08
S38	5	(buffer layer near7 (change or changing) near7 (thickness or growth or growing) direction)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08

6/30/2009 12:06:19 PM

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